HFZT

2SA1012

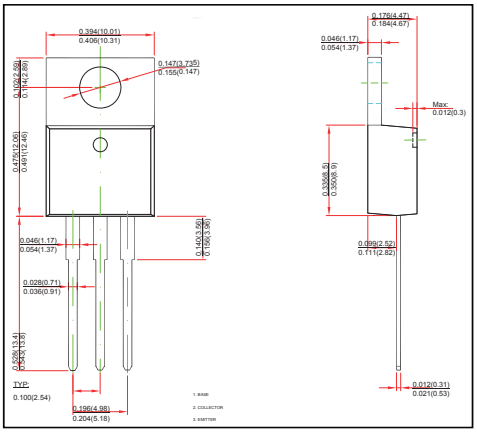
TO-220-3L Plastic-Encapsulate Transistors

FEATURES

- High Current Switching Applications
- Low Collector Saturation Voltage
- High Speed Swithing Time
- TRANSISTOR (PNP)

MECHANICAL DATA

- Case style:TO-220-3Lmolded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-5	A
Collector Power Dissipation	P_C	2	W
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	62.5	℃/W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55~+150	℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C =-0.1mA, I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C =-10mA, I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-50V, I_E=0			-1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0			-1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-1V, I_C=-1A	70		24	
	$h_{FE(2)}$	V_{CE}=-1V, I_C=-3A	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-3A, I_B=-150mA			-0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-3A, I_B=-150mA			-1.2	V
Transition frequency	f_T	V_{CE}=-4V, I_C=-1A		60		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz		170		pF
Turn-on Time	t_{on}	V_{CC}=-30V,I_C=-3A, I_{B1}=-I_{B2}=-0.15A		0.1		μs
Storage Time	t_s			1.0		
Fall Time	t_f			0.1		

*Pulse test: t_p≤300μs, δ≤0.02